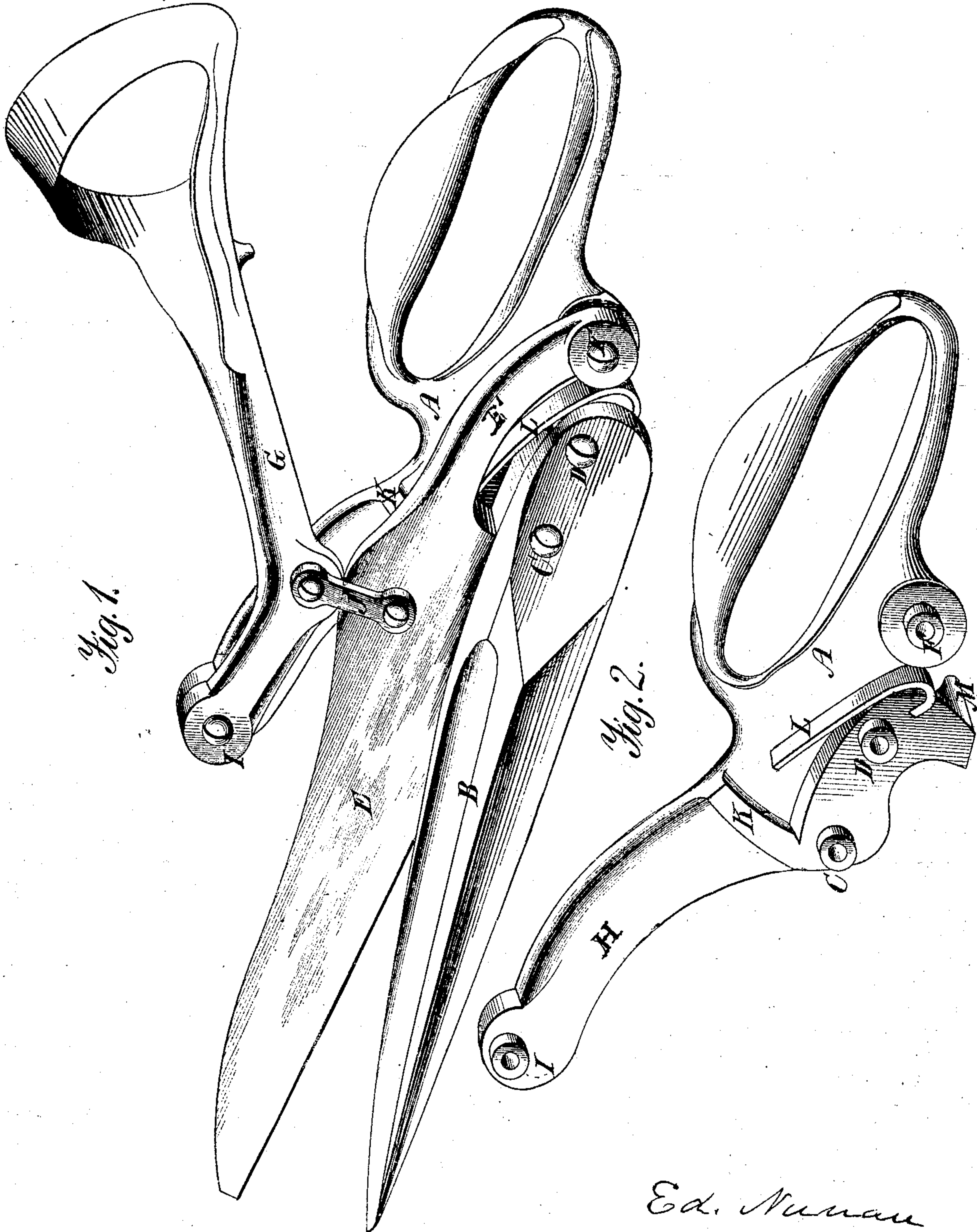


E. NUNAN.
Shears.

No. 146,942.

Patented Jan. 27, 1874.



Witnesses.
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UNITED STATES PATENT OFFICE.

EDWARD NUNAN, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN SHEARS.

Specification forming part of Letters Patent No. **146,942**, dated January 27, 1874; application filed December 30, 1873.

To all whom it may concern:

Be it known that I, EDWARD NUNAN, of the city and county of San Francisco, State of California, have invented certain Improvements in Shears, of which the following is a specification:

This invention relates to that class of shears in which the lower blade may remain constantly on the table, and the upper or movable blade is operated by a lever. My improvement, embodying a rib on the stock for guiding the movable blade, and a spring for opening it, consists in the peculiar combination and arrangement of the parts, hereinafter fully explained.

Figure 1 is a perspective view of a pair of shears with my improvements. Fig. 2 is a like view of the stock.

The same parts in both figures are indicated by like letters.

A is the stock or body, to which the blades are attached—the lower blade, B, rigidly by the bosses and screws C and D, and the upper blade, E, freely by the single boss and screw F. The arm or lever G of the upper handle is pivoted to the arm H of the stock by boss and screw I. The arm G and upper blade E touch each other at the projections shown, and are connected together by the link J. K is a rib, on which the upper blade slides. L is a spring, with one end secured to the stock A, and the other end pressing against the shank E' of the upper blade E, so as to open the shears. The foot M of the stock is placed a little back of the line of pressure.

The operation is as follows: When the shears are held in the hand, they are operated in the usual way; but when resting on a table the

upper handle alone moves. The lower blade and foot remain constantly on the table. The upper handle can be pressed down by the hand and raised by the spring, while the lower handle lies untouched beneath the fabric being cut. This is a great convenience.

The lower handle may be omitted, and the upper one and the foot M extended backward to any desired distance.

It will also be observed that the material being cut is not bent at all on the left side, and only by the cutting on the right side. The angle of the edges to each other and the leverage can be fixed at pleasure to suit the material to be cut.

For thin, light, or easily-cut materials, the angle may be small, and vice versa. The edges are adjustable to each other laterally by the screws C, D, and F, and the rib K. The link J and arm or lever G constitute a toggle-joint, to be varied for light or powerful pressure, according to the purpose to which the shears are to be applied.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The stock A, having the guide-rib K, and carrying the fixed blade B and the movable blade E, substantially as and for the purpose specified.

2. The combination of the stock and guide-rib A K, blades B and E, spring L, arm or lever G, and link J, all constructed and arranged substantially as and for the purpose specified.

EDWD. NUNAN.

Witnesses:

ALFRED RIX,
JOHN C. HALL.